



## Idaho Department of Environmental Quality Draft §401 Water Quality Certification

July 20, 2016

**404 Permit Application Number:** NWW-2016-279-B03, Forest Road 6223, Culvert Upgrade

**Applicant/Authorized Agent:** USDA-Forest Service, Bitterroot National Forest

**Project Location:** T29N R14E S29 NW1/4 NE1/4

**Receiving Water Body:** Sheep Creek

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Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review activities receiving Section 404 dredge and fill permits and issue water quality certification decisions.

Based upon its review of the joint application for permit, received on July 5, 2016, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the activity will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits.

### Project Description

This project involves replacement of an undersized round metal culvert with a pipe-arch that meets bankfull width and aquatic organism passage specification. An estimated 84 cubic yards of rock will be discharged below the ordinary high water mark of Sheep Creek to simulate natural streambed morphology and to stabilize natural channel slope. In- water work will take place during low flows to minimize sediment transport and all disturbed areas will be seeded and planted to natural conditions.

### Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- **Tier 1 Protection.** The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier 1 review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- **Tier 2 Protection.** The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).
- **Tier 3 Protection.** The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier 1 protection for that use, unless specific circumstances warranting Tier 2 protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

### ***Pollutants of Concern***

The primary pollutant of concern for this project is sediment. As part of the Section 401 water quality certification, DEQ is requiring the applicant comply with various conditions to protect water quality and to meet Idaho WQS, including the water quality criteria applicable to sediment.

### ***Receiving Water Body Level of Protection***

This project is located on Sheep Creek within the Upper Selway Subbasin assessment unit (AU) ID17060301CL014\_02 (Selway River - Deep Creek to White Cap Creek). This AU has the following designated beneficial uses: cold water aquatic life, salmonid spawning, primary contact recreation and domestic water supply. In addition to these uses, all waters of the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

According to DEQ's 2012 Integrated Report, Sheep Creek falls entirely within a designated wilderness area (Selway-Bitterroot) and therefore water quality standards are presumed to be attained for all beneficial uses (IDAPA 58.01.02.052.05.a). DEQ will provide Tier 2 protection in addition to Tier 1 for Sheep Creek (IDAPA 58.01.02.051.02; 58.01.02.051.01).

### ***Protection and Maintenance of Existing Uses (Tier 1 Protection)***

As noted above, a Tier 1 review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act and requires demonstration that existing uses and the level of water quality necessary to protect existing uses shall be maintained

and protected. The numeric and narrative criteria in the WQS are set at levels that ensure protection of designated beneficial uses.

During the construction phase, the applicant will implement, install, maintain, monitor, and adaptively manage best management practices (BMPs) directed toward reducing erosion and minimizing turbidity levels in receiving water bodies downstream of the project. In addition, permanent erosion and sediment controls will be implemented, which will minimize or prevent future sediment contributions from the project area. As long as the project is conducted in accordance with the provisions of the project plans, Section 404 permit, and conditions of this certification, then there is reasonable assurance the project will comply with the state's numeric and narrative criteria. These criteria are set at levels that protect and maintain designated and existing beneficial uses.

There is no available information indicating the presence of any existing beneficial uses aside from those that are already designated and discussed above; therefore, the permit ensures that the level of water quality necessary to protect both designated and existing uses is maintained and protected in compliance with the Tier 1 provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

### ***High-Quality Waters (Tier 2 Protection)***

Sheep Creek is considered high quality for aquatic life and contact recreation beneficial uses. As such, water quality relevant to these uses must be maintained and protected unless a lowering of water quality is deemed necessary to accommodate important social or economic development.

To determine whether degradation will occur, DEQ must evaluate how the permit issuance will affect water quality for each pollutant that is relevant to aquatic life and contact recreation beneficial uses (IDAPA 58.01.02.052.06). The only pollutant of concern for this project is sediment. Because sediment is not relevant to contact recreation, project activities will not result in a lowering of water quality with respect to recreational beneficial use support. Sediment is relevant to the aquatic life beneficial use and the permittee must minimize the transport of sediment through the implementation of best management practices (BMPs).

The project will replace an undersized metal culvert with a pipe-arch that meets bankfull width and aquatic organism passage specification. The new channel design will restore the channel through the pipe-arch to natural stream width by removing a constriction on the channel and improving the passage of water, sediment and woody materials. The project will restore the channel bottom through the pipe-arch with native streambed materials. Work will occur at low flow and flow will be diverted around the site during construction, therefore, no work will be performed in running water. Machinery will be operated from outside the stream channel. Protective rip rap will be placed around the pipe arch inlet and outlet and outside the natural channel margins. A rock lined sediment trap will be installed in the upgrade roadside ditch which will reduce excess sediment from flowing into Sheep Creek. Furthermore, the new culvert is expected to be constructed within the same footprint as the existing culvert. Upon completion of the project the surrounding area will be seeded, fertilized and mulched.

Permanent erosion and sediment controls must be implemented that minimize or prevent future sediment contributions from the project area. The provisions in the 404 permit ensure that degradation to Sheep Creek will not occur and conditions of this certification ensure that the

aquatic life beneficial use will be protected. Therefore, DEQ concludes that this project complies with the Tier 2 provisions of Idaho's WQS (IDAPA 58.01.02.051.02; 58.01.02.052.06 and 58.01.02.052.08).

## **Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law**

### ***General Conditions***

1. The proposed project shall be constructed in a manner that will not violate Idaho's Water Quality Standards as set forth in IDAPA 58.01.02.
2. DEQ reserves the right to modify, amend, or revoke this certification if DEQ determines that, due to changes in relevant circumstances – including without limitation, changes in project activities, the characteristics of the receiving waterbodies, or state WQS – there is no longer reasonable assurance of compliance with WQS or other appropriate requirements of state law.
3. If ownership of the project changes, the certification holder shall notify DEQ, in writing, upon transferring this ownership or responsibility for compliance with these conditions to another person or party. The new owner/operator shall request, in writing, the transfer of this water quality certification to his/her name.
4. The applicant is responsible for all work done by contractors and must ensure the contractors are informed of and follow the conditions described in this certification and the section 404 permit.

### ***Fill Material***

1. Fill material shall be free of organic and easily suspendable fine material. The fill material to be placed shall include clean earth fill, sand, and stone only.
2. Excavated or staged fill material must be placed so it is isolated from the water edge and not placed where it could re-enter waters of the state.

### ***Erosion and Sediment Control***

1. All practical best management practices (BMPs) on disturbed banks and in waters of the state must be implemented to minimize turbidity. Turbidity shall not exceed background turbidity by more than 50 NTU instantaneously or more than 25 NTU for more than 10 consecutive days. BMP effectiveness shall be monitored during project implementation. BMPs shall be replaced or augmented if they are not effective.
2. One resource that may be used in evaluating appropriate BMPs is DEQ's *Catalog of Stormwater Best Management Practices for Idaho Cities and Counties*, available online at <http://www.deq.idaho.gov/media/494058-entire.pdf>. Other resources may also be used for selecting appropriate BMPs.

3. Erosion and sediment control measures shall be installed in a manner that will provide long-term sediment and erosion control to prevent excess sediment from entering waters of the state.
4. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
5. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.
6. Maximum fill slopes shall be such that material is structurally stable once placed and does not slough into the stream channel during construction, during periods prior to revegetation, or after vegetation is established.
7. Work in open water is to be kept at a minimum and only when necessary. Construction affecting the bed or banks shall take place only during periods of low flow or when stream diversion is in place.

### ***Pollutants/Toxics***

1. The use of chemicals such as soil stabilizers, dust palliatives, sterilants, growth inhibitors, fertilizers, and deicing salts during construction and operation should be limited to the best estimate of optimum application rates. All reasonable measures shall be taken to avoid excess application and introduction of chemicals into waters of the state.

### ***Vegetation Protection and Restoration***

1. Disturbance of existing riparian and native vegetation shall be kept to a minimum. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
2. If authorized work results in unavoidable vegetative disturbance, riparian and wetland vegetation shall be successfully reestablished to function for water quality benefit at pre-project levels or improved at the completion of authorized work.

### ***Management of Hazardous or Deleterious Materials***

1. Adequate measures and controls must be in place to ensure that petroleum products and hazardous, toxic, and/or deleterious materials will not enter waters of the state.
2. Equipment and machinery must be moved to an upland area prior to refueling, repair, and/or maintenance.
3. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).
4. Any release of petroleum products, hazardous or deleterious materials must be immediately contained and remediated and DEQ must be notified.

### ***Culverts***

1. The culvert shall not constrict the stream channel and shall not be angled such that the outflow is directed toward the stream bank.

2. The culvert outflow shall be armored with riprap to provide erosion control. This riprap will be clean, angular, dense rock that is free of fines and resistant to decomposition.
3. Culverts shall be sized appropriately to maintain the natural drainage patterns.

## Right to Appeal Final Certification

The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5) and the “Rules of Administrative Procedure before the Board of Environmental Quality” (IDAPA 58.01.23), within 35 days of the date of the final certification.

Questions or comments regarding the actions taken in this certification should be directed to Mark Sellet at (208) 799-4370 or email at [mark.sellet@deq.idaho.gov](mailto:mark.sellet@deq.idaho.gov).

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John Cardwell  
Regional Administrator  
Lewiston Regional Office